



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION I  
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BOSTON, MASSACHUSETTS 02109-3912

March 15, 2010

Mr. Thomas Danielson  
Maine Department of Environmental Protection  
17 State House Station  
Augusta, ME 04333-0017

Dear Mr. Danielson:

Thank you for the opportunity to provide comments on Maine Department of Environmental Protection's ("DEP") recently revised nutrient rule (Chapter 583). As you are well aware, excess nutrient enrichment is one of the most significant threats facing our nation's waters. The adoption of numeric nutrient criteria will set clear thresholds which are important for the protection and restoration of waters across the State of Maine. We are providing the following comments to assist in supporting a final nutrient rule.

**Comments:**

1. It is EPA's expectation that states will ultimately adopt numeric water quality criteria for both nitrogen and phosphorus. DEP's proposed rule does not include numeric water quality criteria for nitrogen. We encourage DEP to proceed to develop such criteria expeditiously.
2. Although expressed as "limits," the numeric phosphorus values contained in the proposed rule are, in effect, criteria. We consider these values to be numeric criteria and we would review and approve them as criteria if the final rule is similar to this draft rule. Our preliminary evaluation of the numeric phosphorus values is that they are sufficiently protective and approvable. It is currently EPA's position that causal criteria are needed to prevent water quality impairment.
3. We understand most of the response variable criteria are already contained in Maine's existing water quality standards in one form or another. EPA supports clearly presenting them in one place as contained in the proposed rule. Our preliminary evaluation of the response variable criteria is that they are sufficiently protective and approvable.
4. Box 2 in Maine's decision framework (Figure 1) is problematic and not likely to be approvable as currently written. Box 2 characterizes waters to be "not impaired" when there is an exceedence of the phosphorus limits (which, as explained above, we consider to be criteria), as long as the biological response criteria that have been measured in the water body are met. First, there is no requirement that all applicable response criteria be measured, so the inference of "no impairment" may be based on limited response criteria data. Further, it

is EPA's current position that exceedence of a causal water quality criterion, such as nitrogen or phosphorus, would require a determination of non-attainment regardless of whether the water is meeting a different water quality criterion, such as chlorophyll-a or other biological response criteria<sup>1</sup>. Moreover, the practical effect of the approach presented in Box 2 is that as long as response criteria are met, there would be no applicable phosphorus criterion in effect. This is contrary to EPA's expectation that states will adopt numeric phosphorus criteria that apply to all waters. In particular, this is necessary to set clear thresholds not only for the restoration of impaired waters but to ensure that waters already meeting designated uses do not become impaired.

5. To address both Maine's and EPA's concerns regarding waters that fall into Box 2, site-specific phosphorus criteria could be established. It may be possible to include in the rule a methodology for calculating a site-specific criterion when a water body has higher phosphorus levels than those stated in Table 1, yet exhibits no adverse biological response. Consistent with the development of any water quality criterion, site-specific criteria must protect both near-field and downstream waters. EPA is willing to work with Maine to explore this potential pathway. Such an approach would need to ensure that the procedure has a sound scientific justification that would be applicable to any water body to which it is applied, and that adequate data on the full suite of response criteria have been collected to support the conclusion that there are no adverse biological effects either in the monitored segment of the receiving water or in downstream waters.
6. We believe it is necessary to provide language in the rule that ensures the protection of downstream waters. EPA is willing to work with Maine to explore potential language to make this clear.

Thank you very much for your significant effort on this project. If you have any questions or need further assistance please contact me at (617) 918-1561 or Al Basile at (617) 918-1599. We look forward to speaking with you soon.

Sincerely,



Stephen J. Silva  
Chief, Water Quality Branch

Electronic cc:

Alfred Basile, EPA  
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Jennie Bridge, EPA  
Ann Williams, EPA

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<sup>1</sup> Section 303(d)(1)(A) of the Clean Water Act (CWA) provides that "Each State shall identify those waters within its boundaries for which the effluent limitations...are not stringent enough to implement any water quality standard applicable to such waters." (Emphasis added); see also 40 C.F.R. 130.7(b)(1). Forty C.F.R. § 130.7(b)(3) provides that the term "water quality standard applicable to such waters" includes, among other things, narrative and numeric criteria established pursuant to Section 303 of the CWA.